

1992

MEMORANDUM OF AGREEMENT

by and between

CALIFORNIA DEPARTMENT OF TRANSPORTATION

and the

CALIFORNIA DEPARTMENT OF FISH AND GAME

This Memorandum of Agreement (MOA), made and entered into between the California Department of Transportation, hereinafter referred to as CALTRANS, and the California Department of Fish and Game, hereinafter referred to as CDFG, establishes a Land Bank to protect, conserve, restore, and enhance habitat for the Mohave ground squirrel (*Spermophilus mohavensis*) and the desert tortoise (*Gopherus agassizii*), impacted as a result of State highway improvement projects listed in the seven year State Transportation Improvement Program (STIP) adopted by the California Transportation Commission (CTC), and the Minor Improvement Program adopted by CALTRANS for projects in Inyo, Kern, Los Angeles and San Bernardino counties. This MOA also defines agency roles and responsibilities, and provides a common understanding of actions that will be undertaken for the conservation and protection of the listed species and their habitats during the construction of the State highway projects.

The aforementioned agencies enter into this Memorandum in accordance with the California Endangered Species Act of 1984 (CESA), the California Environmental Quality Act (CEQA), the California Endangered Species Act (CSEA) Consultation Memorandum of Understanding (MOU) between Caltrans and CDFG, and the Memorandum of Agreement on Early Mitigation Planning for Transportation Improvements in California.

WHEREAS, the improvement of State highways is required to improve deteriorating congestion conditions and improve public safety, and;

WHEREAS, pursuant to Fish and Game Code Sections 2052 and 2055, CALTRANS has an affirmative duty to utilize its authority to conserve, protect, restore and enhance State listed endangered and threatened species and their essential habitats, and;

WHEREAS, CALTRANS has determined in accordance with CEQA procedures that certain portions, listed hereafter, of the State highways in Inyo, Kern, Los Angeles and San Bernardino counties should be upgraded, and;

WHEREAS, the proposed State highway projects are in areas that have been determined to be habitat for and support numbers of the State listed Mohave ground squirrel, and the State and Federally listed desert tortoise, and;

WHEREAS, funding will be secured by CALTRANS to cover the costs of measures to mitigate and offset project effects to the listed species, and;

WHEREAS, CALTRANS, through formal consultation and agreement with the CDFG has developed a series of measures, including habitat acquisition, to conserve the listed species and their associated habitats during project activities, and;

WHEREAS, the conditions and mitigation necessary to avoid jeopardizing the endangered species pursuant to the CESA are identified in the CDFG's Biological Opinion, and;

WHEREAS, these projects are scheduled to begin construction within the fiscal year listed in the 1990 and subsequent STIPs, or Minor Improvement Program, and;

WHEREAS, the CDFG has not completed development of a Management Plan for the conservation of the listed species, and;

WHEREAS, the identification, appraisal and acquisition of land suitable for habitat mitigation is a lengthy process;

THEREFORE, in order that the projects listed in the STIP and the Minor Improvement Program may commence construction within the time frames scheduled in the STIP, or the Minor Improvement Program, it is mutually agreed and understood that:

1. The purpose of this MOA is to establish a LAND BANK to be held and administered by CDFG from which habitat management lands will be drawn and placed into a Compensation Account managed to offset impacts to habitat lost to listed species caused by the highway improvement projects listed in the 1990 and subsequent STIPs, including the specific projects listed below, and the Minor Improvement Program. Habitat management land identified for the LAND BANK will be acquired by CALTRANS and transferred to the CDFG to fulfill requirements of CESA Biological Opinions for specific projects.

When endangered species habitat for the LAND BANK is acquired by CALTRANS, title to said land may be acquired in the name of the CDFG, or it may be acquired in the name of CALTRANS and transferred to the CDFG at the time habitat management land is required for a specific project.

A compensation account for the LAND BANK shall be administered by the CDFG. This account will list the amount of total acreage placed in the LAND BANK, each project covered by this agreement, the habitat acreage impacted by each project, the amount of compensation habitat management land required for each project, and the amount of remaining land available in the LAND BANK for future projects.

The amount of habitat management land acres transferred to the LAND BANK for each project will be the acreage determined by the CDFG's Cumulative Human Impact Evaluation for Mohave Ground Squirrel Habitat (CHIEFMGSH). (Said habitat evaluation method is attached to and is a part of this agreement). If the project has not been evaluated by this method, the acres deeded will be five times the number of habitat acres impacted by the project.

This agreement covers projects listed in the current STIP, the Minor Improvement Program, and the projects in the 1990 STIP listed below:

Project

Ker-014-25.5/35.4

Ker-014-62.0/64.5

Ker-395-29.2/30.4

Ker-395-30.4/36.8

Iny-395-25.8/31.2

SBd-015-75.3/75.5

SBd-018-97.5/101.1

SBd-058-0.0/9.0

SBd-058-9.0/24.0

SBd-058-22.7/39.5

LA-138-57.2/60.3

LA-138-53.0/69.4

2. A separate California Endangered Species Biological Opinion for each project covered under this MOA will be prepared by the CDFG. Each Biological Opinion will identify the reasonable and prudent measures required to offset specific project impacts in order to avoid jeopardizing the continued existence of the species.
3. Habitat management lands, if required by the Biological Opinion, will be acquired by CALTRANS as mitigation for habitat impacted by the highway improvement projects covered under this MOA. Parcels acquired for use as habitat management lands must be suitable habitat for both the Mohave ground squirrel and the desert tortoise. CDFG and CALTRANS shall jointly identify suitable habitat for endangered species in the general area bordered by State Highway Route 14 on the West, the western boundary of Fort Irwin and Fort Irwin Road on the East, State Highway Route 58 on the South, and the El Paso Mountains, the Lava Mountains, and the southern boundary of the military facilities on the North.
4. CALTRANS shall transfer to the CDFG a sum of money to perform habitat improvements on the land and a long-term management endowment at the time title to the habitat management lands are transferred to the CDFG.

The amount required for habitat improvement shall be at the rate of \$ 100 per acre transferred, and shall be used by the CDFG for such initial improvements as fencing, revegetation and construction of micro-relief features. Any amount of this fee not used for habitat improvements shall be deposited in an interest bearing account for subsequent use of the principal and interest by CDFG for benefiting the management needs of the species.

The amount required for the long-term management endowment for habitat management lands shall be at the rate of \$ 95 per acre transferred. The CDFG will place the funds in an interest bearing endowment account the interest from which shall be used by the CDFG for the long-term management of the habitat management lands.

5. Land that is transferred to the LAND BANK to satisfy habitat management requirements shall become the responsibility of the CDFG. The CDFG shall have the authority to manage the land to best insure the conservation of the listed species and their habitat and associated ecosystem, including the right to effect land trades to acquire land that may be more suitable to support the goals of a Management Plan for the species, or to turn the land over to a third party such as the Bureau of Land Management or the Nature Conservancy for management purposes. If the land is transferred to a third party for management purposes, yearly interest from the endowment fund for the management of the land will also be transferred to the party taking over the habitat management lands.
6. Land acquired by CALTRANS for use as habitat management lands may either be land purchased in fee and added to the LAND BANK, or by conservation easement on land presently owned by the U.S. Government and managed by the U.S. Bureau of Land Management (BLM), or a combination of private and BLM lands. If BLM lands are utilized, said lands must be managed in a manner that is consistent with the long-term species survival of the Mohave ground squirrel and the desert tortoise. Only land uses that are compatible with the management of viable wild populations of the target species will be allowed.
7. CALTRANS agrees to acquire the required compensation habitat acreage within 36 months from the date of the signing of this MOA. This land will be placed in the LAND BANK for the habitat management required for the above listed projects. This time limit may be extended only by mutual written agreement of CDFG and CALTRANS.
8. In order to help achieve a viable management plan for the Mohave ground squirrel and the desert tortoise, CALTRANS will assist in the preparation of the "WEST MOJAVE COORDINATED MANAGEMENT PLAN". This is a multi-agency plan being prepared by the BUREAU OF LAND MANAGEMENT, in cooperation with the U.S. FISH AND WILDLIFE SERVICE and the CALIFORNIA DEPARTMENT OF FISH AND GAME, for the management of the target species.

CALTRANS will establish a fund of \$ 300,000 to be used to help finance the preparation of this plan. The fund will be administered by the CDFG, and will be used to fund elements of the plan preparation jointly agreed upon by CDFG, CALTRANS and BLM.

Upon the successful completion of this management plan, BLM acreage within the Management Plan area may be utilized by CALTRANS as compensation habitat provided that CALTRANS obtains conservation easements or other agreements necessary to eliminate land uses incompatible with the long-term survival of the target species. BLM habitat utilized as compensation habitat will be credited to CALTRANS on a one-to-one basis against the total amount of compensation habitat required to offset impacts to habitat lost to listed species by the construction projects.

If the proposed "West Mojave Coordinated Management Plan" for the target species is not completed, or if the plan is not satisfactory to all three of the sponsoring agencies, (BLM, U.S Fish and Wildlife Service, and CDFG), CALTRANS will not utilize BLM managed lands as part of the replacement habitat lands required under this agreement and the California Endangered Species Act Biological Opinion for each project.

9. If CDFG and CALTRANS determine that acreage remains in the LAND BANK in excess of that needed to satisfy the CESA Biological Opinion for the impacts of CALTRANS' projects set out in Section 1 above, those lands shall be retained in the LAND BANK, subject to being credited to CALTRANS as provided below.

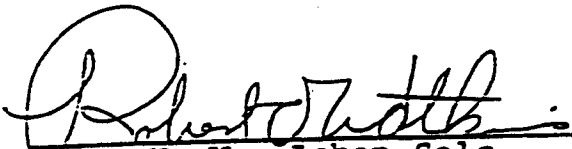
CDFG and CALTRANS shall enter a written agreement to determine the credit amount of acreage remaining in the LAND BANK.

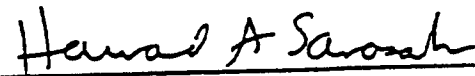
CALTRANS may receive credit in a number of ways including, but not limited to, receiving credit for any remaining acreage in the LAND BANK as compensation habitat for future highway projects. CALTRANS may also sell the remaining acreage credits in the LAND BANK to a third party to satisfy a habitat management obligation, or CDFG may purchase the remaining acreage credits from CALTRANS. Once added to the LAND BANK, acreage cannot be used for any other purpose than for habitat management to offset project impacts to listed species.

10. This MOA may be amended by the mutual consent of the CDFG and CALTRANS.

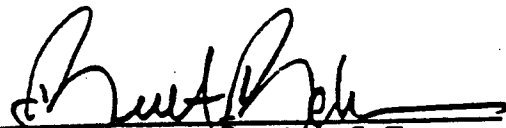
STATE OF CALIFORNIA
Department of Transportation

STATE OF CALIFORNIA
Department of Fish and Game


For James W. Van Loben Sels
Director
Date: April 13, 1992


Boyd Gibbons
Director
Date: 4-21-92

Approved as to form and procedure


Attorney, Department of Transportation

CUMULATIVE HUMAN IMPACT EVALUATION FOR MOHAVE GROUND SQUIRREL HABITAT

The cumulative human impacts evaluation was developed to aid the Department of Fish and Game in determining mitigation requirements for projects which affect Mohave ground squirrel (MGS) habitat by assessing cumulative human impacts to MGS habitat. The rating system was developed based on the Department's Indian Wells Valley Mohave ground squirrel study (Rempel and Clark, 1991). This method was developed for the following reasons:

1. MGS may occur in any habitat within their known range. (This method does not try to equate habitat quality with MGS presence or absence. Not enough is known about this species' requirements to adequately evaluate its habitat needs. This method was not designed to study MGS habitat requirements.)
2. Live-trapping is not a conclusive method of determining presence or absence of MGS. (Sightings of MGS have been made in areas where trap grids were operated and the species was not captured.)
3. MGS are found in both impacted and unimpacted areas within their range.
4. "Take" of MGS will occur concurrent with development throughout the species' range.

METHODOLOGY:

A 1/2 to 3/4 mile meandering transect should be walked through each 160 acres of a project area and copies of the attached data sheets completed. For projects less than 160 acres, the meandering transect should be reduced in length to fit within the parcel. A circular or "U"-shaped transect is most efficient and should be the design utilized for projects greater than 40 acres. On projects less than 40 acres, the entire project area should be encompassed by the transect(s). Notes should be taken concurrent with walking the meandering transect to assist in completing the Cumulative Impact Evaluation Form and the General Habitat Description Form upon completion of the meandering transect. The ranking factors (0-4) should be based on the criteria shown in the attached "Key to Cumulative Habitat Impact Assessment Form". If, after completing the meandering transect(s), uncertainty remains as to the rank of habitat impacts or other information required by the Cumulative Impact Evaluation Form, the meandering transect should be rewalked. The approximate location of the meandering transect(s) should be mapped on the project map and

CUMULATIVE HUMAN IMPACT EVALUATION
FOR MOHAVE GROUND SQUIRREL HABITAT -2-

included as part of the data submission package. All land use impacts (OHV use, horse and foot traffic, dog activity, roads, urbanization, garbage dumping, mining activity, grazing/agricultural activity, shrub disturbance) should be rated for each transect.

General habitat information [shrub density (visual estimate), shrub species diversity, presence of annuals, presence of perennial grasses, presence of desert pavement, description of soils, presence of rocks and boulders and presence of washes] should also be recorded. A minimum of 4 color photos (3" x 5" or larger prints) of the project site where the transect(s) was walked should also be included in the data submission package.

A maximum rating of 40 is possible, with 40 representing the worst case condition for cumulative human impacts to the habitat and 0 representing habitat with no human-related disturbance. Completed data sheets should be submitted to the Department along with the project description. Following the Department's review of the submitted data, the Department will discuss the project's mitigation requirements with the project sponsor and incorporate the requirements into any 2081 Permit or California Environmental Species Act Biological Opinion issued for the project.

CUMULATIVE HABITAT IMPACT EVALUATION FORM

LOCATION: T _____; R _____; _____ 1/4 SEC _____

DATE: _____, 19 _____

SITE: _____ (trapped _____; not trapped _____)

OVERALL RATING: _____

(CIR range: 0 - 40)

(Ranking factors: 0 - 4)

LAND USE IMPACTS (0 = none, 4 = heavily impacted):

1. OHV use _____
2. Horse or foot traffic _____
3. Dog activity _____
4. Roads through area _____
5. Urbanization _____
6. Garbage dumping _____
7. Mining activity _____
8. Utilities _____
9. Grazing and/or agriculture _____
10. Shrub disturbance _____

Average together the five most disturbed factors, then multiply by 10 for the cumulative impact rating (CIR).

GENERAL HABITAT DESCRIPTION:

1. Shrub density estimate: high _____; medium _____;
low _____ (estimate % of each per 1/4 section)
2. Shrub species diversity: >6 _____; 3-5 _____; 1-2 _____
3. Presence of annuals: A _____; B _____; C _____
4. Presence of perennial grasses: A _____; B _____; C _____
5. Presence of desert pavement: (estimate % coverage) _____
6. Soils description: _____

7. Percent rocks and boulders present: (describe) _____

8. Presence of washes: _____ Periodic flooding: _____
9. Slope/Aspect: _____
10. Elevation: _____

OTHER FACTORS OF CONSIDERATION:

Type of grazing allotment:

perennial _____ ephemeral _____

Proximity to known MGS populations: _____

Type of county zoning: _____

COMMENTS:

KEY TO CUMULATIVE HABITAT IMPACT EVALUATION FORM

LAND USE IMPACTS:

A. OHV use:

- 0 = none
- 1 = old evidence, little or no recent activity
- 2 = recent activity, not widespread (1-3 tracks)
- 3 = widespread and recent activity
- 4 = heavily impacted by dirt trails; established OHV tracks

B. Horse and foot traffic:

- 0 = none
- 1 = seen, but must look carefully to find evidence
- 2 = moderate use; seen without much effort
- 3 = easily seen and widespread, but no established trails
- 4 = established trails

C. Dog activity: (domestic, not coyote or fox)

- 0 = none
- 1 = some tracks and/or scat seen, but no sign of digging
- 2 = tracks and scat seen; some digging seen
- 3 = two or more of the above signs easily seen
- 4 = all above signs easily seen; majority of shrubs dug under

D. Roads (including railroads) through the area:

- 0 = none through area; only perimeter roads in distance
- 1 = one interior dirt road and perimeter dirt roads
- 2 = two interior dirt roads and perimeter dirt roads
- 3 = two or more interior dirt roads and perimeter roads either paved or graded and maintained
- 4 = two or more interior maintained or well traveled roads and frequently used graded or paved perimeter roads

E. Urbanization:

- 0 = none to one building, outside the 1/4 section and >1/4 mile distant
- 1 = one to two buildings within 1/4 of the 1/4 section
- 2 = isolated homes and farms within the 1/4 section; developed urban areas >1/4 mile distant
- 3 = developed urban areas adjacent to 1/4 section; but only isolated homes and farms within the 1/4 section
- 4 = developed urban areas within the 1/4 section

F. Garbage dumping:

- 0 = none, except for some litter blown in
- 1 = one to two areas with dump piles containing a few objects; or large amounts of litter blown in
- 2 = two to four small dump sites (1-3 large objects)

- 3 = two to three large dump sites with several large objects
- 4 = one or more large dump sites, containing many things and/or covering large areas

G. Mining activity:

- 0 = none
- 1 = old mine site, revegetating
- 2 = recent small scale "cat" or exploratory activity
- 3 = individual active mining claim or exploration
- 4 = large-scale active mine or devegetated active mine site

H. Utilities:

- 0 = none
- 1 = telephone lines or similar wooden poles
- 2 = major pipeline (above or under ground)
- 3 = high voltage or multiple transmission lines
- 4 = canal or aqueduct (impediment to movement)

I. Grazing and/or agriculture: (agriculture rated if 50% or less of 1/4 section)

- 0 = no history of grazing or agriculture
- 1 = no grazing for 20 years or more; no agriculture
- 2 = old agricultural field; reestablished to native shrubs
- 3 = in a grazing allotment; or old agricultural field with no native shrubs reestablished yet
- 4 = area of cattle or sheep concentration (e.g., feed, watering or salt lick)

J. Shrub disturbance: (result of some human activity)

- 0 = none
- 1 = some damaged shrubs seen at site and occurrence is infrequent
- 2 = damaged shrubs easily found
- 3 = many shrubs disturbed; some completely destroyed
- 4 = many shrubs destroyed (crushed, trampled and with broken limbs)

GENERAL HABITAT DESCRIPTION:

1. Shrub density estimate: (% of each category within 1/4 section)

High: _____ Medium: _____ Low: _____

2. Shrub species diversity:
 - a. greater than six species present
 - b. three to five species present
 - c. one to two species present
3. Presence of annuals:
 - a. good cover both under and between shrubs
 - b. cover found primarily underneath shrubs
 - c. none found
4. Presence of perennial grasses:
 - a. numerous
 - b. present but not numerous
 - c. none found
5. Presence of desert pavement: (estimate % coverage within 1/4 section)
6. Soils description: (e.g., coarse gravelly soil, fine sandy soil, etc.)
7. Rocks and boulders: (estimate % coverage of rocks and boulders) describe location's coverage
8. Presence of washes (describe where within the 1/4 section) or areas of periodic flooding

OTHER FACTORS OF CONSIDERATION:

1. Type of grazing allotment: perennial or ephemeral; include any information about when area was last grazed, cattle or sheep grazing or both, etc.
2. Proximity to known MGS occurrences: include location of these occurrences, distance from 1/4 section, and date MGS were last recorded at that location, etc.
3. Type of county zoning: describe type and potential of area for development.

MOHAVE GROUND SQUIRREL

There is general agreement that the principal threat to the continued existence of the Mohave ground squirrel is the destruction or degradation of its habitat. However, questions have been raised regarding what constitutes suitable habitat for this species. Information gathered through field studies and trapping surveys over the last three years, has caused the Department of Fish and Game to reevaluate what constitutes Mohave ground squirrel habitat. This information also indicates that trapping surveys alone provide insufficient data to determine that Mohave ground squirrels do not occupy a particular site. The best available biological information now suggests that habitat not currently occupied by Mohave ground squirrels may be extremely important and perhaps essential for the long-term survival of the species; therefore, all land within the range of the Mohave ground squirrel should be considered habitat for the species. [The range of the Mohave ground squirrel is the western Mojave Desert from southwestern Inyo County, south through eastern Kern, northwestern San Bernardino and northeastern Los Angeles counties (see attached map)]. The rationale for this determination is presented below.

Mohave ground squirrels are relatively short-lived animals with populations that tend to be spatially redistributed over time. The survival and persistence of Mohave ground squirrel populations are dependent upon the occurrence of seasonal rainfall which promotes the growth of shrubs, forbs and grasses which are the primary food of this species. Because rainfall is not evenly distributed in the desert areas inhabited by this species and because the storm tracks may vary from year to year, habitat conditions suitable for Mohave ground squirrels do not remain geographically constant. Rather, conditions may become suitable or deteriorate and become unsuitable, dependent upon the vagaries of the rainfall pattern. The result of this unequal and variable distribution of rainfall, and its effect on Mohave ground squirrel habitat, is that populations in one area may be extirpated while populations in other areas are being established. This is a natural phenomenon, but it means that habitat not presently occupied by Mohave ground squirrel may be essential to the survival of the species.

The recent drought has caused significant retrenchment of known populations and has resulted in local extirpations. Thus, Mohave ground squirrels are no longer found in areas where they occurred only a few years ago. However, there is every reason to expect that most of these areas will once again support the species once the drought is ended.

MGS Habitat: CDFG March 25, 1991

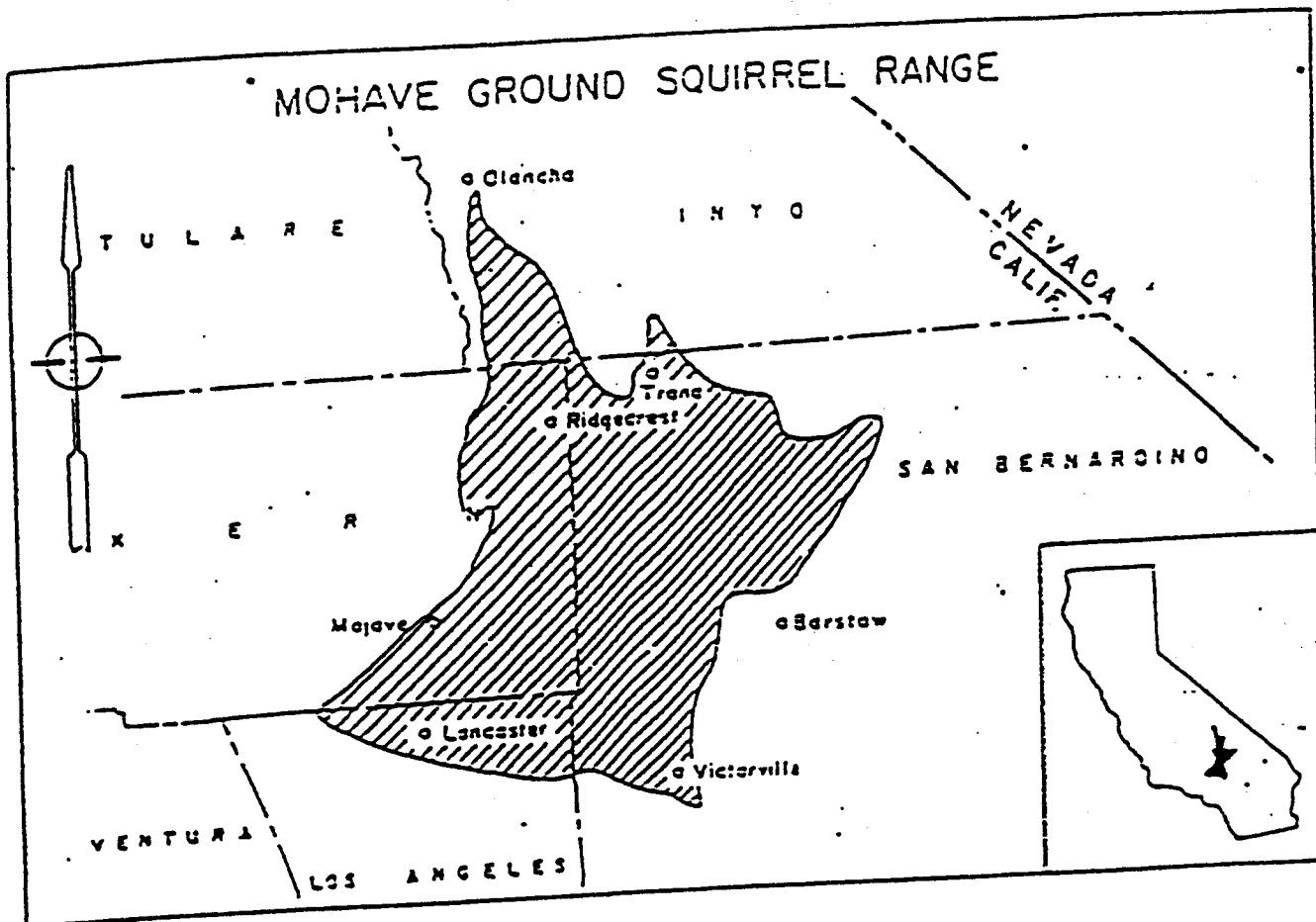
Mohave ground squirrels are relatively difficult to trap under any circumstances, with juveniles typically being much more vulnerable than adults. Biologists report seeing these ground squirrels while establishing trapline grids but subsequently failing to trap any individuals.

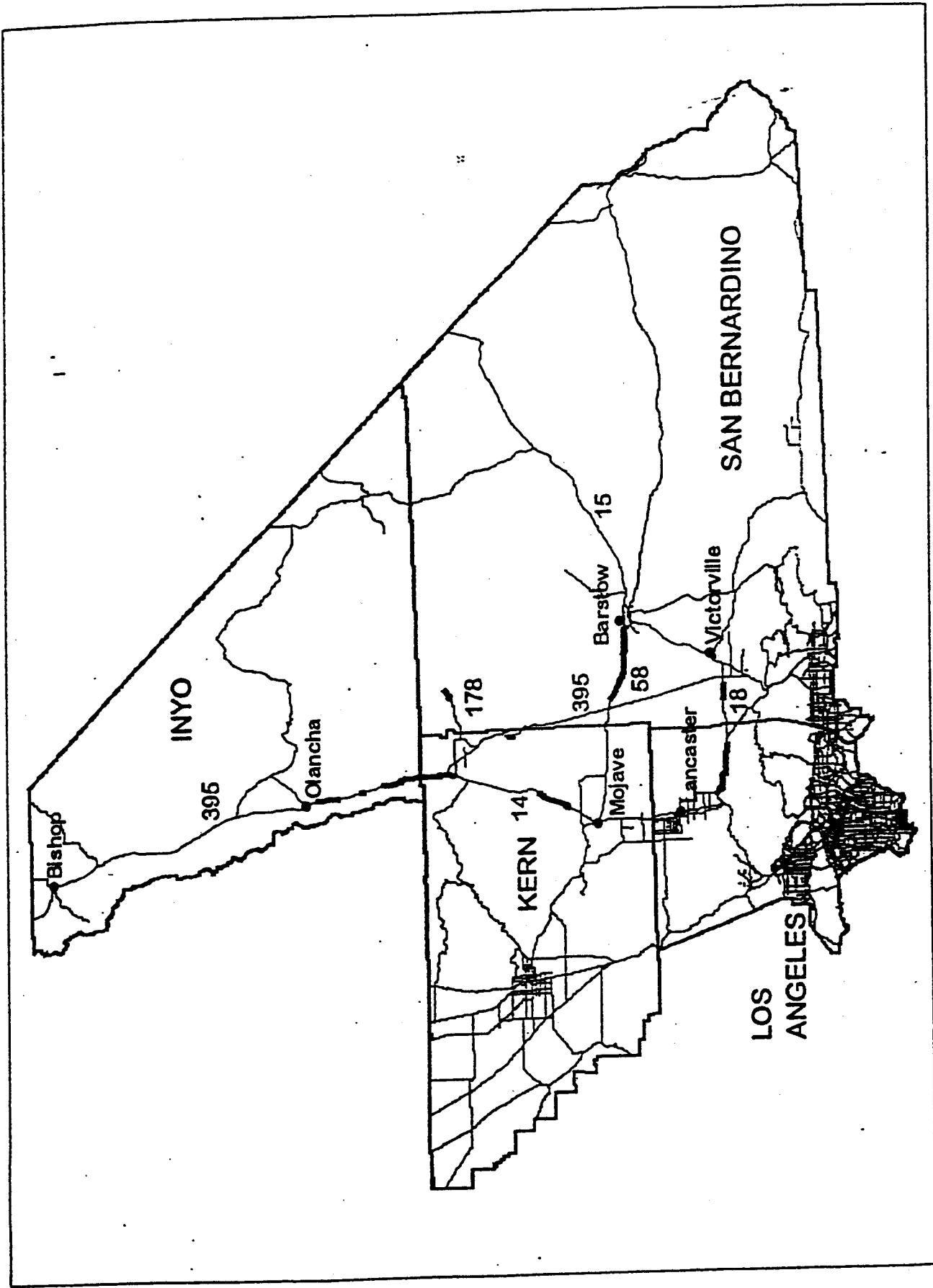
The drought has seriously reduced available forage for Mohave ground squirrels. Researchers report that adults are foregoing reproduction in order to save energy to survive estivation. The result is few if any young are being produced. Thus, the most vulnerable portion of the population to trapping (therefore, the one most likely to provide evidence that the species does occur within a given area) has been removed from the population.

Available evidence also indicates that adults require less time than juveniles to attain the fat reserves necessary to carry them through the period of estivation. As a result, they typically begin estivation weeks before the juveniles. Thus, during periods of severe drought when the juvenile segment of the population is not present because of reproductive failure, the time period when Mohave ground squirrels are vulnerable to observation and trapping would be substantially reduced.

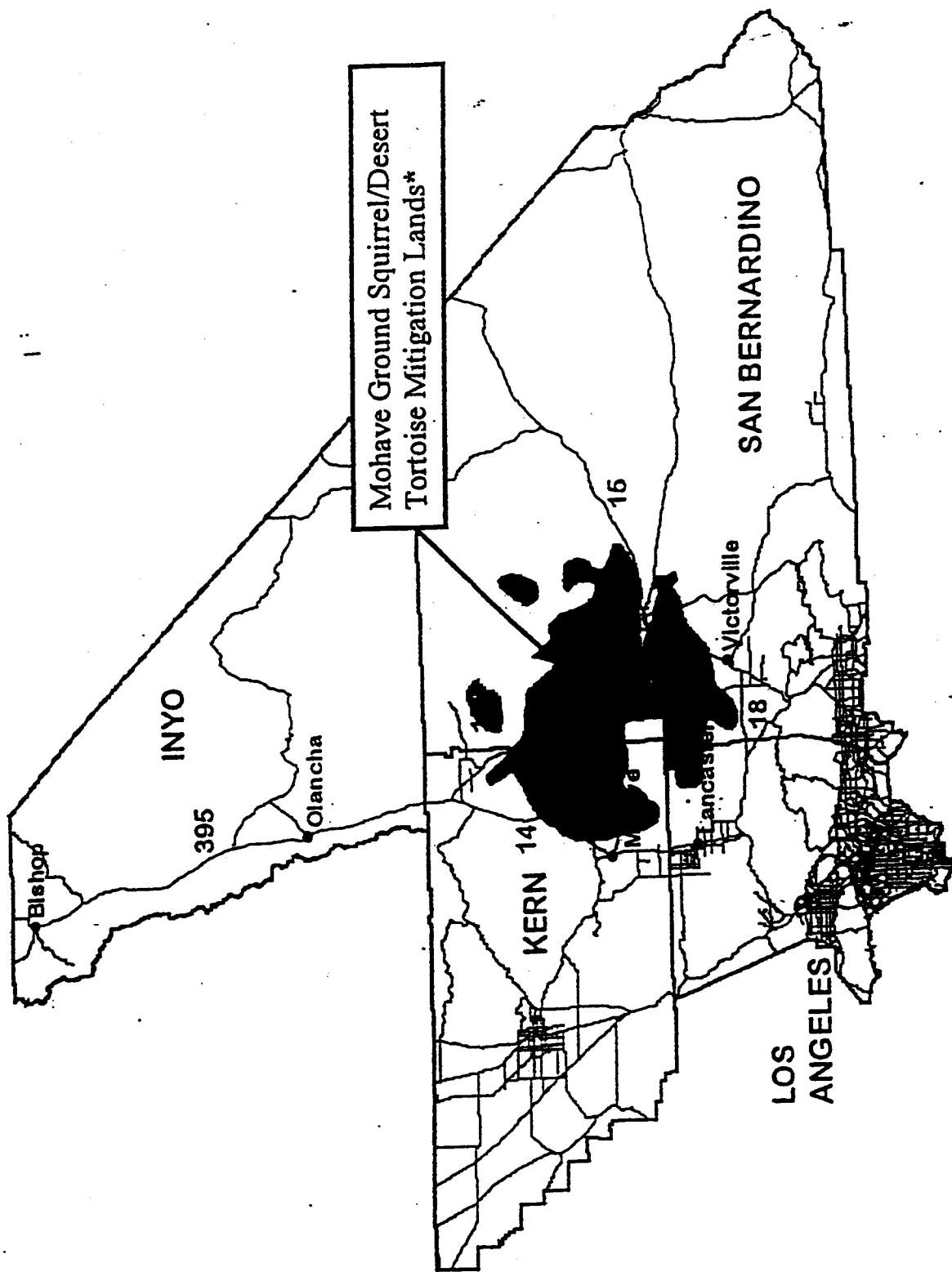
Mohave ground squirrel habitat is difficult to define. A variety of habitat types within several vegetation communities dominated by creosote (Larrea tridentata), shadscale (Atriplex confertifolia) or Joshua tree (Yucca brevifolia) is utilized. Adequate forage is essential and soils suitable for burrowing (generally described as fine to medium texture) are important. However, there have been instances where other cover (e.g., rock/debris piles) has been utilized in lieu of burrows. Mohave ground squirrels may utilize apparently unsuitable habitat or habitat that has been substantially degraded provided local microhabitat exists. Therefore, superficial examination of habitat may result in a false assumption of no suitable habitat and, therefore, no Mohave ground squirrels.

MGS Habitat: CDFG March 25, 1991





— Highway projects covered by MOA



* Area where suitable mitigation acreage may be purchased

MEMORANDUM OF AGREEMENT

by and between the

CALIFORNIA DEPARTMENT OF TRANSPORTATION

and the

CALIFORNIA DEPARTMENT OF FISH AND GAME

THIS AGREEMENT IS AN AMENDMENT TO THE MEMORANDUM OF AGREEMENT BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA DEPARTMENT OF FISH AND GAME, MADE AND ENTERED INTO ON APRIL 21, 1992, REGARDING THE PURCHASE OF LAND FOR THE MITIGATION OF TRANSPORTATION PROJECTS IN THE MOJAVE DESERT.

RECITALS

- A. WHEREAS, a Memorandum of Agreement (MOA) was made and entered into on April 21, 1992, between the California Department of Transportation, hereinafter referred to as CALTRANS, and the California Department of Fish and Game, hereinafter referred to as CDFG, to provide a process whereby CALTRANS could proceed with the construction of certain specified projects prior to the purchase of the mitigation habitat required for said projects, and provide said habitat land at a future date, and;
- B. WHEREAS, CALTRANS and CDFG have determined that the required amount of mitigation land to be purchased by CALTRANS for the CDFG is 4,976.3 acres to fulfill the requirements of the original MOA, and;
- C. WHEREAS, the Biological Opinion for an additional project CALTRANS has constructed (9-Ker-14-42.0/46.2, Red Rock Four-lane Project) requires that 177 acres of compensation habitat be provided as per the provisions of the April 21, 1992, MOA, and;

D. WHEREAS, CDFG has determined that the data needed to develop a plan to better ensure the continued survival of the Mohave ground squirrel is inadequate, and that additional information concerning the habitat range of the species and the habitat requirements such as terrain, vegetation, climatic conditions, etc., is needed in order to better develop said plan, and to identify suitable habitat for land acquisitions that may be required as mitigation for future Caltrans transportation projects, and;

E. WHEREAS, CDFG has requested that the purchase price of \$425.00 per acre, plus the endowment fee of \$95.00 per acre, and the habitat improvement fee of \$100.00 per acre for 1,313.3 acres of the required 5,153.3 acres be paid to CDFG in lieu of the actual acreage, said monies to be used for additional research of the Mohave ground squirrel,

NOW, THEREFORE, in consideration of the mutual terms and provisions herein set forth, the parties agree to the following:

1. CALTRANS shall purchase six sections (3840 acres) of land for and in the name of CDFG described as follows:

Mount Diablo Meridian, California

T. 31 S., R.44 E.

| | |
|---------|-----------|
| Sec. 13 | 640 acres |
| Sec. 23 | 640 acres |
| Sec. 25 | 640 acres |
| Sec. 27 | 640 acres |
| Sec. 35 | 640 acres |

San Bernardino Meridian, California

T. 11 N., R.3 W

Sec. 13 640 acres

2. CALTRANS shall transfer \$ 748,800 to CDFG, as an endowment, upon completion of the land purchase. This endowment consists of \$100 per acre for mitigation enhancement, and \$ 95 per acre for long term management of the purchased habitat mitigation lands, as per the provisions of the original MOA.

3. Upon receipt of title and possession of the 3840 acres of mitigation land, CDFG will be responsible for management activities on said parcels. Management activities may include, but are not limited to fencing and signs needed for protection of the property; biological monitoring; patrolling; interaction with Local, State and Federal individuals and organizations working with similar species and land holdings and conducting research; reporting; management of access including vehicles; and removal of trash and other items as determined. All of the above activities shall be performed at no additional expense to CALTRANS.
4. CALTRANS shall transfer the sum of \$ 814,246 to CDFG upon completion of the above land purchase in lieu of purchasing the 1,313.3 additional acres required to fulfill the habitat replacement acreage determined under the provisions of the original MOA. Said monies shall be utilized by CDFG to fund additional research of the Mohave ground squirrel to better determine the habitat requirements and range of the species. Any monies of this allocation not spent by CDFG for research on the species shall be used by CDFG to purchase additional Mojave ground squirrel and desert tortoise mitigation habitat.
5. Interpretation. This agreement shall be governed by and construed in accordance with the laws of the State of California. The captions of paragraphs used in this MOA are for convenience only. No addition to or modification of any term or provision shall be effective unless set forth in writing, and signed by all parties.
6. Exhibits. All exhibits referred to herein are attached hereto and by reference incorporated herein.

"Exhibit A": Memorandum of Agreement between the California Department of Transportation and the California Department of Fish & Game dated April 21, 1992.

"Exhibit B": Map showing general location of constructed projects that require purchase of mitigation habitat land.

"Exhibit C": Map showing where suitable mitigation acreage may be purchased for the Mohave ground squirrel and desert tortoise.

"Exhibit D": Letter from CDFG confirming mitigation acreage required.

"Exhibit E": Biological Opinion for project 9-Ker-14-42.0/46.2, listing the habitat mitigation acreage requirement.

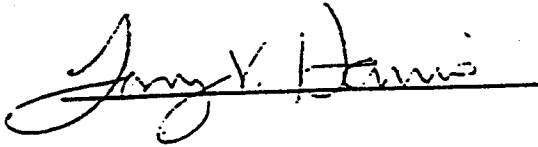
"Exhibit F": Parcel map for land purchase.

7. Any notice permitted or required by this agreement shall be delivered to the persons set forth below or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows or at such other address which any party may from time to time notify each of the other parties in writing: (1) Caltrans, District Director, 500 S. Main St., Bishop, CA 93514; (2) California Department of Fish and Game, 407 West Line St., Bishop, CA 93514.
8. This Agreement may be executed in any number of duplicate and counterpart originals. A complete original of this Agreement containing original signatures of each of the parties shall be circulated to each of the parties by Caltrans, and a complete original of this Agreement shall be maintained in the official records of each of the parties hereto.
9. This Agreement has been executed on the day set by each signature attached hereto and shall become effective on the day and year written below.
10. This agreement may be amended only with the written consent of each of the parties hereto.

014870

Executed this _____ day of _____, 2000.

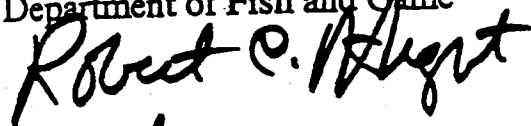
STATE OF CALIFORNIA
Department of Transportation



Director

Date: 9/6/00

STATE OF CALIFORNIA
Department of Fish and Game

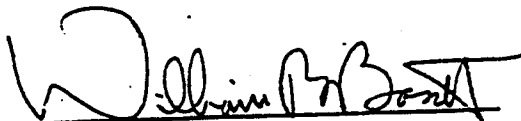


Sept 14-00

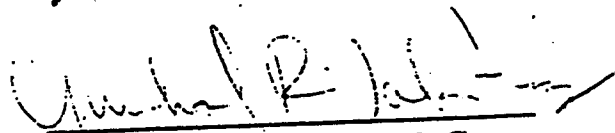
Director

Date: _____

Approved as to form:



Attorney, Dept. of Transportation



Attorney, Dept. of Fish & Game

DEPARTMENT OF FISH AND GAME
Eastern Sierra and Inland Deserts Region
407 West Line Street
Bishop, California 93514
(760) 872-1171



February 19, 1999

Mr. Tom Hallenbeck, District Director
Department of Transportation
District 9
500 South Main Street
Bishop, California 93514

99 FEB 22 11 17:30

Attention: Mr. Ken Deboy


Dear Mr. Deboy:

Department of Fish and Game staff have reviewed your February 4, 1999 letter (attached) regarding mitigation habitat required pursuant to the Memorandum of Agreement between the California Department of Transportation and the California Department of Fish and Game signed on April 22, 1992 (MOA). The Department of Fish and Game concurs with the required acreage for each of the identified projects and the determination of the total acreage requirement of 4,976.3 acres.

I will forward the Biological Opinion for the four Inyo County projects for your files as soon as it is completed. As we have discussed recently, Department of Fish and Game staff will soon begin the process of identification of suitable lands for consideration. This process may involve other participants including Caltrans and the Bureau of Land Management, and perhaps others. I hope to begin this next step during March.

Thanks for your participation and attention to this matter and I look forward to a successful completion to the MOA.

Sincerely,


Alan Pickard, Supervisor
Habitat Conservation Program

Attachment

cc: Mr. Curt Taucher
Ms. Denyse Racine

DEPARTMENT OF TRANSPORTATION

DISTRICT 9

100 S. Main Street

Bishop, CA 93514



February 4, 1999

Mr. Alan Pickard
 Senior Biologist
 Department of Fish and Game
 407 West Line Street
 Bishop, California 93514

Dear Mr. Pickard:

Thank you for meeting with Tom Dayak and myself on Tuesday, February 2, 1999, to discuss the amount of mitigation habitat Caltrans needs to acquire for the Department of Fish and Game to fulfill the terms of the Memorandum of Agreement between the California Department of Transportation and the California Department of Fish and Game signed on April 22, 1992.

Following is a listing of the projects covered by the MOA and the amount of habitat acreage required for each project as determined by the Biological Opinions issued by the Department of Fish and Game and as agreed to in our meetings to date:

| | |
|----------------------|--|
| • Ker-014-25.5/35.4 | 1,106.0 acres |
| • Ker-014-62.0/64.5 | |
| • Ker-395-29.2/30.4 | |
| • Ker-395-30.4/36.8 | These three projects were combined. |
| | 969.0 acres |
| • Iny-395-25.8/31.2 | 395.0 acres |
| • SBd-015-75.3/75.5 | 2.0 acres |
| • SBd-018-97.5/101.1 | 70.0 acres |
| • SBd-058-0.0/9.0 | This project was never constructed. |
| | Mitigation will be determined if the project |
| | Is reprogrammed for construction. |
| | 0.0 acres |
| • SBd-058-9.0/24.0 | 1,418.0 acres |
| • SBd-058-22.7/39.5 | 920.0 acres |
| • LA-138-57.2/60.3 | 3.8 acres |
| • LA-138-53.0/69.4 | <u>14.5 acres</u> |

Total acreage required as per MOA:

4,898.3 acres

Mr. Alan Pickard
February 4, 1999
Page two

In addition to the above projects, there were several additional minor projects that were referenced back to the terms of the MOA for purchase of replacement habitat.

- | | |
|---------------------|-------------------|
| • Ker-178-90.6 | 2.6 acres |
| • Ker-395-3.7/4.3 | 26.7 acres |
| • Iny-395-0.0/11.8 | 12.2 acres |
| • Iny-395-6.9/7.9 | 15.0 acres |
| • Iny-395-17.7/18.1 | 1.5 acres |
| • SBd-178-12.0/14.6 | <u>20.0 acres</u> |

Total acreage required for projects referenced to the MOA: 78.0 acres

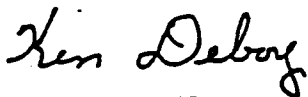
Total acreage to fulfill replacement habitat mitigation requirements
for all of the above listed projects: 4,976.3 acres

As we discussed during our meeting, please provide the Biological Opinion covering the four Inyo county projects (Iny-395-0.0/11.8, Inyo-395-6.9/7.9, Inyo-395-17.7/18.1, and Inyo-395-25.8/31.2) and the San Bernardino project (SBd-178-12.0/14.6) to Caltrans for inclusion in our project records.

Also, please provide Caltrans written confirmation that purchase of this amount of mitigation habitat will fulfill the requirements of the Memorandum of Agreement.

I look forward to meeting with you soon to reach concurrence on areas where suitable mitigation land should be purchased.

Sincerely,



KEN DEBOY
Project Manager

KD:mam

Memorandum

CAL. TRANS. DIST. 9

95 DEC 12 PM 1:30

Date: November 22, 1995

Mr. Lewis K. Wood
District Director, District 9
(Attn: Mr. Thomas B. Dayak)
Department of Transportation
500 South Main Street
Bishop, California 93514

m : Department of Fish and Game

ject: California Endangered Species Act (CESA) Biological Opinion
Red Rock Four-lane Project
Caltrans Project No. 9-KER-14-42.0/46.2 EA 9-214700
CESA Tracking No. 2090-1995-009A-4

The Department of Transportation (Caltrans) has proposed a highway widening project along 4.2 miles of State Route 14 (MP 42.0/46.2) at Red Rock Canyon State Park in eastern Kern County. The existing two-lane roadway will be widened to four lanes, with a 22 to 100-foot-wide median. The project will result in the disturbance to, or loss of, 105 acres. Of the affected area, 22 acres will be under pavement, 79 acres will consist of constructed slopes and median, and four acres of old road will be reclaimed. The constructed slopes and the reclaimed area will be planted with native species.

Pursuant to Fish and Game Code §2090(a) of CESA, Caltrans District 9 has consulted with the California Department of Fish and Game (Department) to ensure that the proposed project is not likely to jeopardize the continued existence of the State-listed endangered desert tortoise (*Gopherus agassizii*).

The project was included in Caltrans' 1992 State Transportation Improvement Program, and is therefore covered by the Memorandum of Agreement (MOA) executed by the Department and Caltrans on April 21, 1992. In addition, the Federal Highway Administration and the U.S. Fish and Wildlife Service have completed an Endangered Species Act Section 7 consultation regarding the impacts of this project on the desert tortoise. The resulting Federal Biological Opinion, 1-8-94-F-7, reports the finding that the proposed project is not likely to jeopardize the continued existence of the desert tortoise. The Federal Opinion further states that the project will not result in the destruction or adverse modification of desert tortoise critical habitat. The Federal Opinion authorizes "incidental take" that is limited to a specific number of tortoises that can be taken either by direct mortality or injury resulting from construction activities, or in the form of "harassment" through moving tortoises from the project site. The Federal Opinion requires several specific terms and conditions to minimize incidental take. Among the measures is a requirement that habitat lands be acquired and managed to mitigate project impacts on the desert tortoise.

The Department concurs with the findings of the Fish and Wildlife Service with respect to this project. The Department also concurs with the measures imposed by the Fish and Wildlife Service to minimize any incidental take of desert tortoise. Therefore, pursuant to Fish and Game Code Section 2095, the Department formally adopts the Federal Biological Opinion as the written findings required by Section 2090. The Department also adopts the terms and conditions of the Federal Biological Opinion as measures necessary to minimize adverse impacts to the desert tortoise. Any take of desert tortoise incidental to the project is consequently not prohibited by CESA, providing Caltrans fully complies with the terms and conditions specified in the Federal Biological Opinion.

In addition to the measures imposed by the Fish and Wildlife Service in the Federal Biological Opinion, the Department specifically requires as part of its consultation on this project that:

1. Caltrans notify or report to the Department, or obtain Department approval, for any event or action that requires notification of, a report to, or approval by the Fish and Wildlife Service under terms of the Federal Biological Opinion; and
2. Caltrans address all notices to or other communications with the Department regarding this project to Michael Mulligan, Environmental Services Division, Department of Fish and Game, 1234 E. Shaw Avenue, Fresno, CA 93710, telephone (209) 445-6152.

The 1992 MOA between Caltrans and the Department will govern Caltrans' obligation to acquire private land and transfer it for use as compensation habitat for the project. The MOA establishes a land bank to protect, conserve, restore, and enhance habitat for the desert tortoise and the Mohave ground squirrel (*Spermophilus mohavensis*). The compensation account for the land bank that was established by the MOA is based upon acreage determinations that result from the Cumulative Human Impact Evaluation Format (CHIEF). CHIEF is an evaluation of Mohave ground squirrel habitat, which for the purposes of the MOA is also used as an indicator of desert tortoise habitat.

Caltrans contracted with the consulting firm Dames & Moore to conduct a CHIEF to determine the appropriate compensation ratios for this project. Dames & Moore ranked habitat within a 314-acre study area. The Dames & Moore CHIEF separated the study area into six areas on the east side of the alignment and six areas on the west side of the alignment. The impact area will occur on land that is within the west-side areas. For this reason, the following analysis is based on the Dames & Moore CHIEF rankings for the west side areas.

Of the 105 acres that will be affected by the project, 66.5 acres of potential habitat will be permanently lost due to roadway (22 acres) and median (44.5 acres) construction. The remaining 38.5 acres of adjacent right-of-way will be temporarily impacted. We believe that the temporary impacts will be fully mitigated through implementation of the re-vegetation plan. Using the CHIEF percentages and appropriate compensation ratios for the 66.5 acres, we calculate a total compensation habitat requirement of 177 acres.

Title to the compensation land will be transferred to the Department consistent with the terms of the MOA. Habitat improvements and long-term management will be funded through payments from Caltrans to the Department, as provided for in the MOA, with payment due at the time title is transferred to the Department.

The Fish and Game Commission has recently removed the Mohave ground squirrel from the State threatened list. However, the Commission's action is still subject to litigation. Until the listing status of the species is finally determined, the Department believes that state agencies should continue to use their authority to conserve the species. To that end, this Biological Opinion includes appropriate findings relevant to the Mohave ground squirrel and specifies reasonable and prudent measures necessary and appropriate to minimize the adverse impacts of any incidental take of the species.

The Department finds that the proposed project will not jeopardize the continued existence of the Mohave ground squirrel or result in the destruction or adverse modification of habitat essential to the continued existence of the species. Therefore, there is no basis for specifying project alternatives to prevent jeopardy. The Department further finds that the project could result in the taking of individuals of the species incidental to the project. The Department finds that the acquisition and management of compensation lands for the desert tortoise, as described above, will also minimize adverse impacts of any incidental take of Mohave ground squirrel.

Thank you for your participation in the consultation process. If you have any questions, comments or further correspondence regarding the issuance of the Department's Biological Opinion, please feel free to contact Michael Mulligan at (209) 445-6152 or David Showers at (916) 653-9779.


C. F. Raysbrook
Interim Director

MANSON:rkx

cc: Mr. Craig Manson, General Counsel
Mr. John Turner, Chief, Environmental Services Division
Mr. Chris Patin, Acting Regional Manager, Region 4